

REMARKS

This Amendment is being filed in response to the Final Office Action mailed February 10, 200, which has been reviewed and carefully considered. Entry of the present amendment and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-5, 7-8, 10 and 12-13 remain in this application, where claims 1, 10 and 13 are independent.

In the Final Office Action, claims 1-5, 7-8, 10 and 12 are rejected under 35 U.S.C. §102(b) over EP 1062914 (Lazarev). Further, claim 13 is rejected under 35 U.S.C. §103(a) over Lazarev in view of U.S. Patent No. 6,459,755 (Li). Applicants respectfully traverse and submit that claims 1-5, 7-8, 10 and 12-13, as amended, are patentable over Lazarev and Li for at least the following reasons.

On page 6 of the Final Office Action, it is alleged that the claims do not recite a "single" detector array. This allegation is respectfully traversed as the claim recite an array, and refer back to it as 'the' array, thus clearly the very same array is being

referred to, which is a single array. However, to advance prosecution, the claims have been amended for better clarity. Such amendments to the claims were not made in order to address issues of patentability and Applicants respectfully reserve all rights under the Doctrine of Equivalents.

Lazarev is directed to a computerized tomography based on an object being imaged with small angle scattered radiation. As shown in FIG 2 and recited in paragraph [0035] of Lazarev, a primary or passed radiation 8 (as labeled in FIG 1), passing through the investigated object 4, first passes through a spatial filter 5, and then is received by a detector 3. The detector 3 also receives scattered radiation scattered 7 (as labeled in FIG 1) from the investigated object 4. Assuming, arguendo, that the primary radiation 8 is received by a first line at a side of the detector 5, this first detector line is the first line along which the object of interest is displaced, shown by the large arrow in FIG 2 near the head of the patient being imaged.

In stark contrast, the present invention as recited in independent claim 1, and similarly recited in independent claims 10 and 13, amongst other patentable elements recites that

(illustrative emphasis provided):

wherein the first line is the last line of the single radiation detector array in the direction along which the object of interest is displaced with respect to the single radiation detector array.

These features are nowhere disclosed or suggested in Lazarev. Column 12, 15-17 of Lazarev, noted on page 3, paragraph one, last two lines of the Final Office Action, merely recites: "During the rotation of the frame 10 a transporting bed 11, with the investigated object 4 on it, is displaced along the axis of rotation." Such a recitation has nothing to do regarding whether the first line is a first or last line along which the object of interest is displaced.

Further, as shown in FIG 5 and recited in paragraph [0040] of Lazarev, the primary radiation beam 8 that passes through the investigated object 4 impinges on detectors 9 located on a spatial filter 5. As clearly shown in FIG 5, the detectors 9 and the spatial filter 5 are located between the investigated object 4 and the spatially-sensitive detector 3 that receives scattered radiation 7 scattered from the investigated object 4. That is, the detectors 9 and the spatially-sensitive detector 3 are two

different elements and are not part of a single array.

In stark contrast, the present invention as recited in independent claim 1, and similarly recited in independent claims 10 and 13, amongst other patentable elements recites that (illustrative emphasis provided):

a single radiation detector array;

wherein the source of radiation is adapted to generate a fan-shaped radiation beam; wherein single the radiation detector array is asymmetrically arranged with respect to the fan-shaped radiation beam; wherein a first part of the single radiation detector array is used for a cone beam data acquisition and a second part of the single radiation detector array is used for scatter radiation measurements; ...

wherein the single radiation detector array includes a plurality of detector lines each with a plurality of detector elements arranged in a line; ...

wherein a primary radiation attenuated by the object of interest impinges on a first line of the plurality of detector lines; ...

wherein the first line is the last line of the single radiation detector array in the direction along which the object of interest is displaced with respect to the radiation detector array.

Having a single detector array with detector lines for detecting both primary radiation attenuated by the object of interest and scatter radiation measurements, where the first line is the last line of the radiation detector array in the direction

along which the object of interest, is displaced with respect to the radiation detector array, is nowhere disclosed or suggested in Lazarev. At best, Lazarev discloses two separate detector arrays, namely, the spatial filter 5 or detector 9 and the spatially-sensitive detector 3, where the first line is the first line of the radiation detector array in the direction along which the object of interest. Thus, Lazarev teaches away from having the last line of the radiation detector array in the direction along which the object of interest, as recited in independent claims 1, 10 and 13. Li is cited to allegedly show other features and does not remedy the deficiencies in Lazarev.


Accordingly, it is respectfully submitted that independent claims 1, 10 and 13 should be allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2-5, 7-8 and 12 should also be allowed at least based on their dependence from amended independent claims 1 and 10.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the

presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

By 
Dicran Halajian, Reg. 39,703
Attorney for Applicant(s)
April 1, 2009

THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101